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10/098,598	03/18/2002	Hideaki Okamoto	220869US2	7647

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EXAMINER

GILLIAM, BARBARA LEE

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 10/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

10/098,598

Applicant(s)

OKAMOTO, HIDEAKI

Examiner

Barbara Gilliam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 15-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) 11 is/are objected to:
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-14 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the claims are part of an overlapping search area and that there is no undue burden on the Examiner to search all the claims because a search for Claims 1-14 would necessarily include the subclass required for a search directed to Claims 15-23 as well. This is not found persuasive because as pointed out in the restriction requirement, the inventions are related as process and apparatus for its practice. Because the apparatus can be used to practice another materially different process the inventions are distinct according to the MPEP 806.05(e). Additionally the inventions have acquired a separate status in the art as shown by their different classification.

2. The requirement is still deemed proper and is therefore made FINAL. Claims 15-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

4. Claim 11 objected to because of the following informalities: Claim 11 contains a typographical error. Claim 11 requires component (D) of claim 10 to be cyanine type dyes however, component (B) of the composition is a sensitizing dye and component (D) is a high molecular binder. See page 12 of specification, paragraphs [0030]+.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-10, 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Toshimitsu et al.

a. The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

b. In US 6,558,875 B1, Toshimitsu et al. teach a method for treating a photosensitive lithographic printing plate, which comprises exposing the photosensitive lithographic printing plate to laser light, developing with a developer containing an alkali metal silicate and then carrying out post-exposure treatment at a light intensity of at least 20 mW/cm<sup>2</sup> (abstract & claim 8). A semiconductor laser with a wavelength of 700 to 1,300 nm and a value of 0.5 to 200 mJ/cm<sup>2</sup> can be used as the laser light source. After laser exposure, the exposed printing plate may be subjected to heat treatment at a temperature in the range of from 40 to 300° C (column 13, lines 43-64). The light amount of post-exposure is usually in the range of from 10 to 10,000 mJ/cm<sup>2</sup>, preferably in the range of 10 to 1,000 mJ/cm<sup>2</sup> (column 15, lines 37-44). Examples of the light source used in post exposure include a high pressure mercury lamp (column 15, lines 21-32). The post exposure light energy meets the present limitations to be from 1 to 70 times larger than the light exposure energy at the time of laser light scanning exposure. The printing plate comprises a polymerizable photosensitive layer and a protective layer on a support (abstract & claim 8). The protective layer is presented as an oxygen-shielding layer (column 12, lines 39-43). The photopolymerizable photosensitive layer comprises a high molecular binder, an addition polymerizable compound having at least one ethylenically unsaturated double bond and a photopolymerization initiator (column 4, lines 35-42). A sensitizer can be used in the initiator system and can be any compound effectively generating an active radical in the presence of a radical generating agent when the agent is activated by irradiation with ultraviolet light, visible light or infrared light (column 8, lines 8-14). The

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photopolymerizable photosensitive layer meets the present limitations for the photopolymerizable composition.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being obvious over Toshimitsu et al. in view of Oohashi et al.

a. The applied reference (Toshimitsu et al.) has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after

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November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

b. As indicated in the rejection under 35 USC 102(e), Toshimitsu et al. (US 6,558,875 B1) teach a method for treating a photosensitive lithographic printing plate, which comprises exposing the photosensitive lithographic printing plate to laser light, developing with a developer containing an alkali metal silicate and then carrying out post-exposure treatment at a light intensity of at least 20 mW/cm<sup>2</sup> (abstract & claim 8). A sensitizer can be used in the initiator system and can be any compound effectively generating an active radical in the presence of a radical generating agent when the agent is activated by irradiation with ultraviolet light, visible light or infrared light (column 8, lines 8-14). Toshimitsu et al. do not specifically teach cyanine dyes as the sensitizing dye however Toshimitsu et al. clearly teach that the printing plate can be imaged with infrared radiation. Cyanine dyes are conventional sensitizing dyes that absorb in the near infrared radiation as evidenced by the teachings of Oohashi et al (column 87, lines 50-56). Therefore it would have been obvious to incorporate an infrared absorbing sensitizing dye such as cyanine dye into the photopolymerization photosensitive layer of Toshimitsu et al. when the plate is irradiated with exposure light emitting infrared light with reasonable expectation of obtaining a plate that is suitable for infrared exposure.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being obvious over Toshimitsu et al. in view of Takasaki et al.

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a. The applied reference (Toshimitsu et al.) has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

b. As indicated in the rejection under 35 USC 102(e), Toshimitsu et al. (US 6,558,875 B1) teach a method for treating a photosensitive lithographic printing plate, which comprises exposing the photosensitive lithographic printing plate to laser light, developing with a developer containing an alkali metal silicate and then carrying out post-exposure treatment at a light intensity of at least 20 mW/cm<sup>2</sup> (abstract & claim 8). Toshimitsu et al. do not specifically teach triazine compounds or organic borates as



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suitable photoinitiators however, based on the teachings of Takasaki et al. triazine compounds and organic boron complexes yield high sensitivity (column 22, lines 1-67).

c. Therefore it would have been obvious to incorporate known photopolymerization initiators such as the organic boron complexes or the halomethylated triazine compounds in the photopolymerization photosensitive layer of Toshimitsu et al. with reasonable expectation of obtaining a printing plate with high sensitivity according to the teachings of Takasaki et al. (column 22, lines 1-67).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. In US 20003/0157429 A1, Blum et al. teach a method for imaging patterning composition.

b. In US 2003/0118945 A1, Okamoto teach a method for making lithographic printing plate.

c. In US 6,455,230 B1, Damme et al. teach a method for preparing a lithographic printing plate by ablation of a heat sensitive ablatable imaging element.

d. In US 4,356,254, Takahashi et al. teach an image-forming method using o-quinone diazide and basic carbonium dye.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Gilliam whose telephone number is 703-305-

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1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 703-308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

b. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Barbara Gilliam*

Barbara Gilliam  
Examiner  
Art Unit 1752

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